



Colour plate 1

- Fig. 1, 2: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♂ ups and uns, gen. vern., /Makedonia, Klis. Treska, 18.IV.1938/147/ *Pieris balcana* sp. n. Holotypus ♂/Holotypus ♂, *Pieris pseudorapae balcana* LORKOVIC, 1968//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 459, Abb. 29, 30/. EMEM.
- Fig. 3, 4: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♀ ups and uns, gen. vern., /Makedonia, Klis. Treska, 18.IV.1938// Allotypus ♀, *Pieris pseudorapae balcana* LORKOVIC, 1968//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 459, Abb. 27, 28/. EMEM.
- Fig. 5, 6: *Pieris persis* VERITY, 1922, ♂ ups and uns, gen. vern., 7.4.1978 (b), Iran, Kurdistan, Zagros-Gebirge, Prov. Kermanschah, Kerend, 1800 m, leg. BACK & REISSINGER. EMEM.
- Fig. 7, 8: *Pieris persis* VERITY, 1922, ♀ ups and uns, gen. vern., 7.4.1978 (b), Iran, Kurdistan, Zagros-Gebirge, Prov. Kermanschah, Kerend, 1800 m, leg. BACK & REISSINGER. EMEM.
- Fig. 9, 10: *Pieris pseudorapae pseudorapae* VERITY, 1908, ♂ ups and uns, gen. vern., /Libanon, Feitroun, nordöstlich Beirut, 1200 m, 4.4.-15.4.1968, leg. DIETGENS//GP 1093//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 445, Abb. 9, 10/. EMEM.

- Fig. 11, 12: *Pieris pseudorapae pseudorapae* VERITY, 1908, ♀ ups and uns, gen. vern., /Libanon, Feitroun, nordöstlich Beirut, 1200 m, 4.4.-15.4.1968, leg. DIETGENS//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 445, Abb. 11, 12/. EMEM.
- Fig. 13, 14: *Pieris pseudorapae mazanderana* EITSCHBERGER, 1986, ♂ ups and uns, gen. vern., /22.4.1979, Iran sept., Prov. Mazanderan, Elburs sept. or., Muh. Reza Pahlevi Nat. Park, 700 m, leg. BACK & REISSINGER//Holotypus *Pieris pseudorapae mazanderana* EITSCHBERGER, 1986, Atalanta 17 (1986)//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 459, Abb. 11, 12/. EMEM.
- Fig. 15, 16: *Pieris pseudorapae mazanderana* EITSCHBERGER, 1986, ♂ ups and uns, gen. vern., /21.4.1978, Iran sept., Prov. Mazanderan, Elburs sept., 120-250 m, Umg. Schazeid, (30 k-35 km südl. Amol), leg. BACK & REISSINGER//Paratypus *Pieris pseudorapae mazanderana* EITSCHBERGER, 1986, ATALANTA 17 (1986)//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 459, Abb. 23, 24/. EMEM.
- Fig. 17, 18: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♂ ups and uns, gen. aest., /Jugosl. Macedonien, Treskaschlucht, 500 m, bei Skopje, 9.7.1971, leg. GROSS//GP 1123//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 463, Abb. 112/. EMEM.

Colour plate 2

- Fig. 1, 2: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♀ ups and uns, gen. aest., Jug. Macedonia, SoPotniko bei Bitola, 7.VIII.1979, J. REICHEL leg. EMEM.
- Fig. 3, 4: *Pieris persis* VERITY, 1922, ♂ ups and uns, gen. aest., Iran, Prov. Kurdistan, Hoseyn Abad, 1500 m, 30.VII.1975, leg. W. L. BLOM. EMEM.
- Fig. 5, 6: *Pieris persis* VERITY, 1922, ♀ ups and uns, gen. aest., Iran, Prov. Kurdistan, Hoseyn Abad, 1500 m, 30.VII.1975, leg. W. L. BLOM. EMEM.
- Fig. 7, 8: *Pieris pseudorapae pseudorapae* VERITY, 1908, ♂ ups and uns, gen. aest., /Libanongebirge, Dj. Barouk, 1700-1900 m, Zedern von Maasser, 30 km südöstl. Beirut, 1.6.1969, leg. GROSS//GP 1102//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 445, Abb. 31, 32/. EMEM.
- Fig. 9, 10: *Pieris pseudorapae pseudorapae* VERITY, 1908, ♀ ups and uns, gen. aest., /Libanongebirge, oberh. Faitroun, 1250 m, 25 km nordöstl. Beirut, 10.6.1969, leg. GROSS. EMEM.
- Fig. 11-14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂♂ ups and uns, gen. vern., Armenia, Kotayk, ca. 37 km N Yerevan, Aghveran, 40°31'09"N 44°33'47"E, 1800-2200 m, 16.06.2011, leg. GRIESHUBER. EMEM.
- Fig. 15, 16: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., Armenia, Kotayk, Aghveran, 1800 m, 24.05.2006, leg. ANDREYEV S. EMEM.
- Fig. 17, 18: *Pieris persis* VERITY, 1922, ♂ ups and uns, gen. aest., /Türkei, Hakkari, vic. Uzümci, 1300 m, 23.8.[19]79, leg. GÖRGNER//GP 2302// *Pieris persis* VERITY, 1922, 28.V.1984, EITSCHBERGER det./. EMEM.

Colour plate 3

- Fig. 1-4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., /Türkei, Büyükada, Prinzeninsel, IV.1969, leg. K. H. NIKODEMUS//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 455, Abb. 16, 17, 20, 21/. EMEM.
- Fig. 5, 6: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., Muslim gölüs, Iznik gölüz, Prov. Bursa TR, 169 m, 28.3.1982, leg. G. MÜLLER. EMEM.
- Fig. 7, 8: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., Muslim gölüs, Iznik gölüz, Prov. Bursa TR, 169 m, 28.3.1982, leg. G. MÜLLER//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 455, Abb. 9/. EMEM.
- Fig. 9, 10: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., Asia Minor, Türkei, NW-Anatolien, Prov. Bolu, Abant Gölü, 1000 m, 10.6.1980, leg. G. MÜLLER, Marburg. EMEM.
- Fig. 11, 12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., /Asia Minor, Türkei, NW-Anatolien, Prov. Bolu, Abant Gölü, 1000 m, 7.7.1980, leg. G. MÜLLER, Marburg//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 455, Abb. 12//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 32, Figur 25/. EMEM.
- Fig. 13, 14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., Uludag, Tarihiçinar, 600 m, TR, 10.4.1982, leg. G. MÜLLER. EMEM.
- Fig. 15, 16: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., / Uludag, 600 m, Tarihiçinar, NW-Anat. Bursa, 9.4.1982, leg. G. MÜLLER//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Taf. 455, Abb. 11//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 32, Figur 24/. EMEM.
- Fig. 17, 18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., UdSSR, Westkaukasus, Abchasi-en, 25.V.1958, 1900 m. EMEM.

Colour plate 4

Fig. 1, 2: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., Caucasus, Suchumi, 1000 m, 23.IV.1981, V. LUKHTANOV leg. EMEM.

Fig. 3-10: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂♂, ♀♀ ups and uns, gen. vern., Nord Kaukasus, Kislovodsk vic., Podkumok, 6.-10.V.1997, P. BEDA leg., EMEM, X.1997. EMEM.

Fig. 11-14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., Aserbajdjan [Aserbeidschan], Lenkoran, vic. Alexeevka, 12.IV.1980, coll. DANTCHENKO. EMEM.

Fig. 15-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., Armenia, 1800 m, Dilizhan, 19.V.1979, V. LUKHTANOV leg. EMEM.

Colour plate 5

Fig. 1, 2: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., U.S.S.R., Armenia, Chosrov pres., 1500 m, 16.VI.1986, O. GORBUNOV leg. EMEM.

Fig. 3, 4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., Armenia, Khosrov State Reserve, 2000 m, 20.VI.-10.VII.1996, A. DANTCHENKO leg. EMEM Sept. 1996. EMEM.

Fig. 5-8: *Pieris belovi spec. nov.*, pupae, Armenia, Aragaz, Amberd Valley left side, 3400 m [correct is 3120 m], female coll. 15.VIII.1998, ex ovo 20.23.1998, A. DANTCHENKO leg., EMEM, 10.VI.2010. EMEM.

Colour plate 6

Fig. 1-4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., U.S.S.R., Nachitchevan, Zangezur Range, Bitchemek settl., 1600 m, [♂] 22.V.1982, [♀] 30.V.1982, GORBUNOV leg. EMEM.

Fig. 5-16: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂♂, ♀♀ ups and uns, gen. vern., Armenia, Aragaz, Amberd Valley left side, 2800 m [correct is 2220 m], 8.VI.1997, A. DANTCHENKO leg., EMEM, X.1997. EMEM.

Fig. 17, 18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. aest., /Asia Minor, Türkei, Östl. Schwarzes Meer, Prov. Trabon, Trabzon Sumela-Kloster, 1400 m, 25.9.1979, leg. G. MÜLLER, Marburg//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 455, Abb. 7/. EMEM.

Colour plate 7

Fig. 1-2: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. aest., /Asia Minor, Türkei, Östl. Schwarzes Meer, Prov. Trabon, Trabzon Sumela-Kloster, 1400 m, 25.9.1979, leg. G. MÜLLER, Marburg//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 455, Abb. 5/. EMEM.

Fig. 3-6: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. aest., SO-Europa, europ. /Türkei, Marmarameer, Bosphorus, Istanbul, Yesilköy beim Flughafen, 31.10.1981, leg. G. MÜLLER, Marburg//[♀] Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 457, Abb. 12/. EMEM.

Fig. 7-14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂♂ ups and uns, gen. aest., Nord Kaukasus, Kislovodsk vic., Podkumok, [♀ leg] 6.-10.V.1997, P. BEDA leg. [cult. A. DANTCHENKO in Moscow, e. o. VI.1997], EMEM, X.1997. EMEM.

Fig. 15-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂♂ ups and uns, gen. aest., Dagestan, Gunib, 1800 m, e.o. 15.IX.1997, A. DANTCHENKO leg. EMEM.

Colour plate 8

Fig. 1-4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀♀ ups and uns, gen. aest., Dagestan, Gunib, 1800 m, e.o. 15.IX.1997, A. DANTCHENKO leg. EMEM.

Fig. 5-8: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. aest., Transcaucasia, Azerbaijan, Lerik vic., 1100 m, e.o. 11.-22.VI.1995, A. DANTCHENKO leg. et cult. EMEM.

Fig. 9-12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. aest., U.S.S.R. Georgia, Trialetsky mont. [range], Tzratzkharo Pass, 2350 m, 13.VIII.1986, O. GORBUNOV leg. EMEM.

Fig. 13, 14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. aest., Georgia, Meshetskyi Mt., Atzcuri, 7.-9.VII.1987, BASIL TUZOV. EMEM.

Fig. 15, 16: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. aest., U.S.S.R., Nachitchevan, Zangezur Range, Bitchemek settl., 1600 m, 26.V.1982, GORBUNOV leg. EMEM.

Fig. 17, 18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. aest., Armenia, Aiodzorsky range, Gnyshchik vill., H. 1900-2200 m, 16.-30.7.[19]98, leg. S. A. ANDREEV [ANDREYEV]. EMEM.

Colour plate 9

Fig. 1-4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. aest., UdSSR, Armenia, Cachkadzor [Tzakhkadzor], 1800 m, 16.7.1985, leg. JIRI KLIR. EMEM.

Fig. 5-8: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. aest., Armenia, Khosrov Res., 2000 m, 1.-10.7.[19]96, A. CHUVILIN leg. EMEM.

- Fig. 9, 10: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. aest., Armenia, Aragatz mts., 2800 [2200] m, 11.-28.07.[19]96, A. CHUVILIN leg. EMEM.
- Fig. 11, 12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. aest., Armenia, Aragatz, 11.-28.07.1996, A. DANTCHENKO leg., EMEM, Sept. 1996. EMEM.
- Fig. 13-16: *Pieris pseudorapae mazandarana* EITSCHBERGER, 1986, ♂, ♀ ups and uns, gen. aest., /N-Iran, Pr. Mazandaran, ca. 30 km S Chalus, vic. Marzanabad, ca. 600 m, 21.7.1979, leg. C. NAUMANN, Coll. Nr. 1886, coll. NAUMANN//GP 1712/Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, (♂) Tafel 457, Abb. 9, 10; (♀) Tafel 459, Abb. 1, 2//Holotypus ♂ - Allotypus ♀, *Pieris pseudorapae mazandarana* EITSCHBERGER, 1986/. EMEM.
- Fig. 17, 18: Hybrid ♂, A. DANTCHENKO cult. in Moscow [*P. napi* ♂ from Moscow City, 16.V.1997 x *P. pseudorapae suffusa* ♀, Nord Kaukasus, Kislovodsk vic., Podkumok, [♀ leg.] 6.-10.V.1997, P. BEDA leg.]. EMEM.

Colour plate 10

- Fig. 1, 2: *Pieris bowdeni* EITSCHBERGER, 1983, ♂ ups and uns, gen. vern., /Türkei, Agri, Asagi Kent, 2200-2400 m, 3.-5.7.[19]76, ECKWEILER leg.//Holotypus ♂, *Pieris bowdeni* EITSCHBERGER, 1982//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 441, Abb. 31, 32/. EMEM.
- Fig. 3, 4, 7, 8: *Pieris bowdeni* EITSCHBERGER, 1983, PTs ♂♂, ups and uns, gen. vern., /Türkei, Agri, Asagi Kent, 2200-2400 m, 3.-5.7.[19]76, Eckweiler leg.//Paratypus ♂, *Pieris bowdeni* EITSCHBERGER, 1982//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, (3, 4) Tafel 443, Abb. 15, 16; (7, 8) Tafel 443, Abb. 13, 14/. EMEM.
- Fig. 5, 6: *Pieris bowdeni* EITSCHBERGER, 1983, Paratypus ♂, ups and uns, gen. vern., /Türkei, Erzurum, Palandöken Dag, 2800-3000 m, 25.VII.[19]78, leg. ECKWEILER//Paratypus ♂, *Pieris bowdeni* EITSCHBERGER, 1982//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 443, Abb. 21, 22//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 32, Figur 40/. EMEM.
- Fig. 9-12, 15, 16: *Pieris bowdeni* EITSCHBERGER, 1983, Paratypus ♀♀, ups and uns, gen. vern., /Türkei, Agri, Asagi Kent, 2200-2400 m, 3.-5.7.[19]76, ECKWEILER leg.// (9, 10, 15, 16) Paratypus ♀, (11, 12) Holotypus ♀, *Pieris bowdeni* EITSCHBERGER, 1982//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, (9, 10) Tafel 443, Abb. 1, 2; (11, 12) Tafel 443, Abb. 33, 34; (15, 16) Tafel 443, Abb. 35, 36// (only 11, 12) Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 32, Figur 43/. EMEM.
- FIG. 13, 14: *Pieris bowdeni* EITSCHBERGER, 1983, Paratypus ♀, ups and uns, gen. vern., /Türkei, Erzurum, Palandöken Dag, 2800-3000 m, 25.VII.[19]78, leg. ECKWEILER//Paratypus ♂, *Pieris bowdeni* EITSCHBERGER, 1982//GP 1624/. EMEM.
- Fig. 17, 18: *Pieris belovi spec. nov.*, PT ♀, ups and uns, gen. vern., Transcaucasus, Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 18.07.1996, DANTCHENKO leg. EMEM.

Colour plate 11

- Fig. 1-4, 17, 18: *Pieris belovi spec. nov.*, (1, 2) holotype ♂, (3, 4) PT ♂, (17, 18) allotype ♀, ups and uns, gen. vern., Transcaucasus, Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 18.07.1996, DANTCHENKO leg. EMEM.
- Fig. 5-8: *Pieris belovi spec. nov.*, PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 24.07.[19]96 [wild caught 2 ♀♀ laid eggs, the breded adults emerged in May 1997, DANTCHENKO leg. et cult in Moscow], DANTCHENKO leg. EMEM.
- Fig. 9-12: *Pieris belovi spec. nov.*, PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz, 3000-3200 m, female col. 10.VII.1999, ex ovo 28.-30.IV.2000, A. DANTCHENKO leg. et cult. EMEM, 30.XII.1999. EMEM.
- Fig. 13-16: *Pieris belovi spec. nov.*, PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, after hibernation e.l. May 2009, A. DANTCHENKO leg. EMEM, 10.VI.2010. EMEM.

Colour plate 12

- Fig. 1, 2: *Pieris belovi spec. nov.*, PT ♀, ups and uns, gen. vern., Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 24.07.[19]96, DANTCHENKO leg. EMEM.
- Fig. 3-6: *Pieris belovi spec. nov.*, PTs ♀♀, ups and uns, gen. vern., Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 24.07.[19]96 [wild caught ♀ laid eggs, the breded adults emerged in May 1997, A. DANTCHENKO leg. et cult. in Moscow], DANTCHENKO leg. EMEM.
- Fig. 7-10: *Pieris belovi spec. nov.*, PTs ♀♀, ups and uns, gen. vern., Armenia, Aragatz, 3000-3200 m, female col. 10.VII.1999, ex ovo 28.-30.IV.2000, A. DANTCHENKO leg. et cult. EMEM, 30.XII.1999. EMEM.
- Fig. 11-14: *Pieris belovi spec. nov.*, PTs ♀♀, ups and uns, gen. vern., Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, after hibernation e.l. May 2009, A. DANTCHENKO leg. EMEM, 10.VI.2010. EMEM.
- Fig. 15-18: *Pieris belovi spec. nov.*, PTs ♂♂, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, copula m[♂]/W[♀] hatched May 2009; F2 e.o. July 2009, A. DANTCHENKO lg. et cult., EMEM, 10.VI.2010. EMEM.

Colour plate 13

- Fig. 1-4: *Pieris belovi spec. nov.*, PTs ♀♀, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, copula m[♂]/W[♀] hatched May 2009; F2 e.o. July 2009, A. DANTCHENKO lg. et cult., EMEM, 10.VI.2010. EMEM.
- Fig. 5, 6: *Pieris belovi spec. nov.*, PT ♂, ups and uns, gen. aest., Armenia, Aragatz, 3200 [3100] m, Alagez lake, 24.07. [19]96 [wild caught ♀ laid eggs, the breded adults emerged in September 1996, A. DANTCHENKO leg. et cult in Moscow], DANTCHENKO leg. EMEM.
- Fig. 7-10: *Pieris belovi spec. nov.*, PT ♀, ♂, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, part. 2nd generation el. end VIII.2008, A. DANTCHENKO leg., EMEM, 10.VI.2010. EMEM.
- Fig. 11-18: *Pieris belovi spec. nov.*, PT ♀♀, ♂♂, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m, left side, female coll. 15.VIII.1998, e. o. 20.-23.VIII.1998, A. DANTCHENKO leg., EMEM, 10.VI.2010. EMEM.

Colour plate 14

- Fig. 1, 2: *Pieris bryoniae goergneri* EITSCHBERGER, 1985, HT ♂, ups and uns, gen. vern., /Türkei, Hakkari, Karandag-Osthang, 2900-3100 m, 2.VIII.1982, leg. GÖRGNER, col. Nr. 143//Holotypus ♂, *Pieris bryoniae goergneri* EITSCHBERGER, 1985, Typ.-Nr.//abgebildet in Atalanta Bd. 16, Tafel I, p. 258, Fig. 1//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 31, Figur 24/. EMEM.
- Fig. 3, 4: *Pieris bryoniae goergneri* EITSCHBERGER, 1985, PT ♂, ups and uns, gen. vern., / Türkei, Hakkari, Bercelem yaylasi, 2500-2800 m, 30.VII.-5.VIII.[19]78, leg. ECKWEILER// Paratypus ♂, *Pieris bryoniae goergneri* EITSCHBERGER, 1985, Typ.-Nr.//abgebildet in Atalanta Bd. 16, Tafel I, p. 258, Fig. 3//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 31, Figur 20/. EMEM.
- Fig. 5, 6: *Pieris bryoniae goergneri* EITSCHBERGER, 1985, AT ♀, ups and uns, gen. vern., /Türkei, Hakkari, Karandag-Osthang, 2900-3100 m, 2.VIII.1982, leg. GÖRGNER, col. Nr. 143//Allotypus ♀, *Pieris bryoniae goergneri* EITSCHBERGER, 1985, Typ.-Nr.//abgebildet in Atalanta Bd. 16, Tafel I, p. 258, Fig. 2//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 31, Figur 36/. EMEM.
- Fig. 7, 8: *Pieris bryoniae goergneri* EITSCHBERGER, 1985, PT ♀, ups and uns, gen. vern., /Türkei, Hakkari, Karandag-Osthang, 2900-3100 m, 2.VIII.1982, leg. GÖRGNER, col. Nr. 143//Paratypus ♀, *Pieris bryoniae goergneri* EITSCHBERGER, 1985, Typ.-Nr.//abgebildet in Atalanta Bd. 16, Tafel I, p. 258, Fig. 6//Abgebildet in HESSELBARTH, VAN OORSCHOT & WAGENER: Tagfalter der Türkei, Tafel 31, Figur 40/. EMEM.
- Fig. 9-12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., Armenia, Sevan lake, Shorza, Artanish cape, 2100 m, 22.05.2006, Andreyev S. A. leg. EMEM
- Fig. 13, 14: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂, ups and uns, gen. vern., Nord-Kaukasus, Uzunkol, 2100 m, 31.VII.1984, LIMONOV leg. EMEM.
- Fig. 15, 16: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂, ups and uns, gen. vern., USSR-Caucasus, Elbrus, 2500 m, 22.-29.7.1984, leg. J. KLIR. EMEM.
- Fig. 17, 18: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂, ups and uns, gen. vern., Kaukasus, Dombai, Ulgen-Tal, 23.7.1973, 2000 m, Dr. KARGER. EMEM.

Colour plate 15

- Fig. 1, 2: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♀, ups and uns, gen. vern., U.S.S.R., W-Kaukasus, Momzyshka [Momzyshkha, Gagra vic.], (1700 m), 16.VII.1985, SVESHNIKOV [JEVGENI] leg. EMEM.
- Fig. 3, 4: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♀, ups and uns, gen. vern., Nordwestkaukasus, Teberda, 21.7.1972, Dzagat Tal, 2000-2400 m, leg. FRANZ EICHLER. EMEM.
- Fig. 5, 6: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♀, ups and uns, gen. vern., Kaukasus/SU, Mussa Atschitara See, 2800 m, 2.8.1976, PETER SALK Berlin. EMEM.
- Fig. 7-14: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂♂, ♀♀, ups and uns, gen. vern., Georgia, 2500 m, Borzhomi region, Trialetzky range, pass Tskara-Tskaro [Tsra-Tskhara pass], 5.VII.1999, A. DANTCHENKO leg., EMEM, 31.XII.1999. EMEM.
- Fig. 15-18: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♀, ♂, ups and uns, gen. vern., Transcaucasia, Georgia, 2100-2300 m, Bakurinai env., Tsra-Tskhara pass, female coll. 2.VII.1999, ex ovo 30.IV.-11.V.2000, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.

Colour plate 16

- Fig. 1, 2: *Pieris bryoniae turcica* EITSCHBERGER & HESSELBARTH, 1977, ♂, ups and uns, gen. vern., /Asia Minor, Türkei, NW-Anatolien, Prov. Bolu, Abant Gölü, 1400 m, 13.6.1980, leg. G. MÜLLER, Marburg. EMEM//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 435, Abb. 5, 6/. EMEM.
- Fig. 3-12: *Pieris bryoniae turcica* EITSCHBERGER & HESSELBARTH, 1977, 2 ♂♂, 3 ♀♀, ups and uns, gen. vern., TR-Bolu, 12 km n Bolu, 1800 m NN, 11.6.[19]92, Hensle leg. EMEM.
- Fig. 13, 14: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂, ups and uns, gen. aest., Georgia, Borzhoni vall., Tsra-Tskhara

pass, 2450 m, [female coll. 5.VII.1999] e. o. Anfang VIII.1999, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.

Fig. 15-18: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂♂, ♀, ups and uns, gen. vern., Transcaucasia, Georgia, 2100-2300 m, Bakurina env., Tsra-Tskhara pass, female coll. 2.VII.1999, ex ovo 30.IV.-11.V.2000, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.

Colour plate 17

Fig. 1, 2, 15, 16: *Pieris bryoniae henslei* subsp. nov., (1, 2) HT ♂, (15, 16) PT ♀, U.S.S.R., Armenia m., Zangezur Mt. distr., Megri-pass (2800 m), 1-VII.1986, OLEG GORBUNOV leg. EMEM.

Fig. 3-12: *Pieris bryoniae henslei* subsp. nov., PTs 2 ♂♂, 2 ♀♀, (7, 8) AT ♀, Armenia m., Zangezur Mt. distr., Megri-pass (2800 m), 1-VII.1986, OLEG GORBUNOV leg. EMEM.

Fig. 13, 14: *Pieris bryoniae henslei* subsp. nov., PT ♂, U.S.S.R., Armenia, Kafan distr., Chuztup mont., 2200 m, 26.VI.1982, GORBUNOV leg. EMEM.

Fig. 17, 18: *Pieris bryoniae henslei* subsp. nov., PT ♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv., 18.-25.VII.1999, A. DANTCHENKO leg., EMEM, 24.XI.2012. EMEM.

Colour plate 18

Fig. 1, 2: *Pieris bryoniae henslei* subsp. nov., PT ♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv., 18.-25.VII.1999, A. DANTCHENKO leg., EMEM, 24.XI.2012. EMEM.

Fig. 3-14: *Pieris bryoniae henslei* subsp. nov., PTs 3 ♂♂, 3 ♀♀, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi river, female collected End of July 1999, ex ovo 28.IV.-3.V.2000, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.

Fig. 15-18: *Pieris bryoniae henslei* subsp. nov., PTs ♂, ♀, Armenia, Zangezur range, Kadzharan vic., 2700 [2450] m, 22.07.2005, leg. ANREYEV S. A. EMEM.

Specimens for article *Pieris belovi* spec. nov. *Pieris bryonia henslei* subspec. nov.

Pieris belovi sp.n.

The specimens collected in the field or obtained from the pupae after hibernation

1. 31 males, 37 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 24.07.96, e.o. June 1997
2. 1 male, 4 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 14.07.98, e.o. 1-4.05.1999
3. 7 males, 12 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 10.07.99, e.o. 28-30.04.2000
4. 16 males, 8 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. August 2005, e.l. May 2006
5. 30 males, 14 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. 7.08.2008, e.l. May 2009

The specimens which should be treated as second (artificial?) generation or invaded in breeding with the food plant.

1. 1 males. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 24.07.96, e.o. emerg. August 1996
2. 2 male, 2 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 15.08.98, e.o. September 1998
3. 1 males. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. July 2002, e.o. August 2002
4. 1 male, 1 female. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. 7.08.2008, e.l. emerg. end August 2008

The specimens of 2 generation obtained from F2 copulating (2009)

1. 9 males, 4 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. 7.08.2008, e.l. emerg. May 2009, e.o. July 2009

Specimens for color plates

Pieris belovi sp.n.

1 gen.

1. 2 males, 6 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 24.07.96, e.o. June 1997
2. 2 males, 2 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 10.07.99, e.o. 28-30.04.2000
3. 3 males, 3 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. 7.08.2008, e.l. May 2009
4. HOLOTYPE et ALLOTYPE 1 male, 1 female. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, 24.07.96 A.Dantchenko & Andreev S. leg.

2 gen.

1. 1 male. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 24.07.96, e.o. emerg. August 1996
 2. 1 male. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. July 2002, e.o. August 2002
 3. 2 male, 2 females. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, fem. coll. 15.08.98, e.o. September 1998
 4. 1 male, 1 female. Armenia, Aragatz mnt., Amberd vall. left side, 3000-3200m, larvae coll. 7.08.2008, e.l. emerg. end August 2008
- 8 ♂♂, 1 ♀, Armenia, Aragatz, Amberd valley 3400 m, left side, larva coll. 7.VIII.2008, copula m[♂]/W[♀] hatched May 2009; F2 e.o. July 2009, A. DANTCHENKO lg. et cult., EMEM, 10.VI.2010. EMEM.

Pieris bryoniae henslei subspec. nov.

Colour plate 17

HT ♂, PT 1 ♀, U.S.S.R., Armenia m., Zangezur Mt. distr., Megri-pass (2800 m), 1-VII.1986, OLEG GORBUNOV leg. EMEM.

PTs 5 ♂♂, 2 ♀♀, AT ♀, Armenia m., Zangezur Mt. distr., Megri-pass (2800 m), 1-VII.1986, OLEG GORBUNOV leg. EMEM.

- PT 1 ♂, U.S.S.R., Armenia, Kafan distr., Chuztup mont., 2200 m, 26.VI.1982, GORBUNOV leg. EMEM.
 PT 4 ♂♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv., 18.-25.VII.1999, A. DANTCHENKO leg., EMEM, 24.XI.2012. EMEM.
 PT 1 ♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv., 18.-25.VII.1999, A. DANTCHENKO leg., EMEM, 24.XI.2012. EMEM.
 PTs 17 ♂♂, 19 ♀♀, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi river, female collected End of July 1999, ex ovo 28.IV.-3.V.2000, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.
 PTs 1 ♂, 1 ♀, Armenia, Zangezur range, Kadzharan vic., 2700 [2450] m, 22.07.2005, leg. ANREYEV S. A. EMEM.

Pieris bryoniae turcica EITSCHBERGER & HESSELBARTH, 1977

- 1 ♂/Asia Minor, Türkei, NW-Anatolien, Prov. Bolu, Abant Gölü, 1400 m, 13.6.1980, leg. G. MÜLLER, Marburg. EMEM//Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 435, Abb. 5, 6/. EMEM.
 6 ♂♂, 12 ♀♀, TR-Bolu, 12 km n Bolu, 1800 m NN, 11.6.[19]92, HENSLE leg. EMEM.
 1 ♀, /Türkei, 2000 m, Uludag bei den Hotels, 26.VII.1981, G. MÜLLER leg., coll. EITSCHBERGER//abgebildet in Atalanta 16, Tafel 1, p. 258, Fig. 9// Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 435, Abb. 3, 4/. EMEM.
 1 ♂, Georgia, Borzhoni vall., Tsra-Tskhara pass, 2450 m, [female coll. 5.VII.1999] e. o. Anfang VIII.1999, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.
 1 ♂, /Asia Minor, Türkei, N-Anatolien, Prov. Bursa, Uludag-gebirge, 2000 m, 18.6.1997, leg. G. MÜLLER, Marburg// abgebildet in Atalanta 16, Tafel 1, p. 258, Fig. 8// Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 435, Abb. 1, 2/. EMEM.
 1 ♂, /Asia Minor, Türkei, Istanbul Ost, Kartal, NW-Anatolien, Aydos Dag Südhang, 300 m, 12.6.1981, leg. G. MÜLLER, Marburg// Abgebildet in EITSCHBERGER (1983), Systematische Untersuchungen am *Pieris napi-bryoniae*-Komplex, Tafel 433, Abb. 35, 36/. EMEM.
 1 ♂, Türkei, Prov. Gümüşhane, 40°32'N 40°13'E, Soganli Geçidi, 2400 m, 30 km n Bayburt, 4.VII.1984 LF, leg. WERNER WOLF. EMEM.
 4 ♂♂, 5 ♀♀, [Türkei] Yedi [Göller], 1600 [m], 28.5.[19]99 [J. FUCHS leg.]. EMEM.

Pieris bryoniae caucasica LORKOVIC, 1968

- 11 ♂♂, 18 ♀♀, Transcaucasia, Georgia, 2100-2300 m, Bakurina env., Tsra-Tskhara pass, female coll. 2.VII.1999, ex ovo 30.IV.-11.V.2000, A. DANTCHENKO leg. et cult., EMEM, 30.XII.1999. EMEM.

Abbreviations

- AT: Allotype.
 EMEM: Entomologisches Museum Dr. ULF EITSCHBERGER, Marktleuthen, Forschungsinstitut des McGuire Center for Lepidoptera & Biodiversity, Gainesville, Florida, U. S. A.
 GP: Genitalpräparat.
 gen. vern.: Generatio vernalis - 1. spring/generation.
 gen. aest.: Generatio aestivalis - 2. summer/generation.
 HT: Holotype.
 PT: Paratype.
 TD: Typusdeposition/Typenverbleib.
 TL: Typuslokalität/Type locality.

Colour plate 1



Fig. 1-4: *Pieris pseudorapae balcana* LORKOVIC, 1970, (1, 2) ♂, (3, 4) ♀ ups and uns, gen. vern., Makedonia, Klis. Treska. EMEM.
 Fig. 5-8: *Pieris persis* VERITY, 1922, (5, 6) ♂, (7, 8) ♀, ups and uns, gen. vern., 7.4.1978 (b), Iran, Kurdistan, Zagros-Gebirge. EMEM.
 Fig. 9-12: *Pieris pseudorapae pseudorapae* VERITY, 1908, (9, 10) ♂, (11, 12) ♀ ups and uns, gen. vern., Libanon, Feitroun EMEM.
 Fig. 13-16: *Pieris pseudorapae mazanderana* EITSCHBERGER, 1986, (13, 14) ♂, (15, 16) ♀ ups and uns, gen. vern., /22.4.1979, Iran sept.,
 Prov. Mazanderan, Elburs sept. or.
 Abb. 17, 18: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♂ ups and uns, gen. aest., /Jugosl. Macedonien, Treskaschlucht. EMEM.
 Complete data see legend p. ??

Colour plate 2

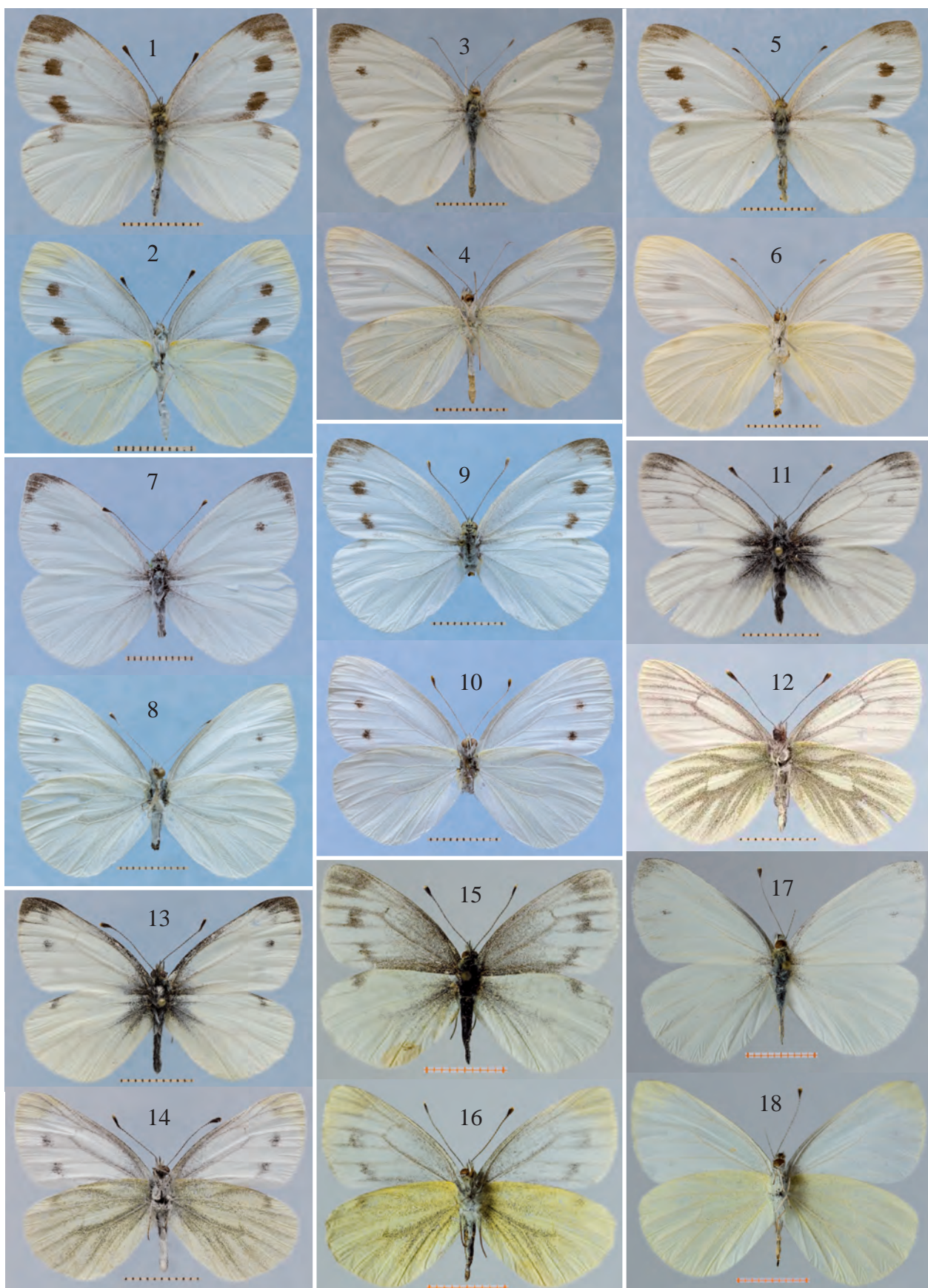


Fig. 1, 2: *Pieris pseudorapae balcana* LORKOVIC, 1970, ♀ ups and uns, gen. aest., Jug. Macedonia, SoPotniko bei Bitola. EMEM.
 Fig. 3-6: *Pieris persis* VERITY, 1922, (3, 4) ♂, (5, 6) ♀ ups and uns, gen. aest., Iran, Prov. Kurdistan, Hoseyn Abad. EMEM.
 Fig. 7-10: *Pieris pseudorapae pseudorapae* VERITY, 1908, (7, 8) ♂, (9, 10) ♀ ups and uns, gen. aest., Libanongebirge. EMEM.
 Abb. 11-14: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, (11-14) ♂♂, (15, 16) ♀ ups and uns, gen. vern., Armenia, Kotayk. EMEM.
 Abb. 17, 18: *Pieris persis* VERITY, 1922, ♂ ups and uns, gen. aest., Türkei, Hakkari, vic. Uzümci. EMEM.
 Complete data see legend [p. ??](#)

Colour plate 3



Fig. 1-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 (Complete data see legend p. ??)
 Fig. 1-4: ♂, ♀ ups and uns, gen. vern., Türkiye, Büyükada, Prinzeninsel. EMEM.
 Fig. 5, 6: ♂ ups and uns, gen. vern., Muslim gölüs, Iznik gölüs, Prov. Bursa TR. EMEM.
 Fig. 7, 8: ♀ ups and uns, gen. vern., Muslim gölüs, Iznik gölüs, Prov. Bursa TR. EMEM.
 Fig. 9, 10: ♂ ups and uns, gen. vern., Asia Minor, Türkiye, NW-Anatolien, Prov. Bolu, Abant Gölü, 1000 m. EMEM.
 Fig. 11, 12: ♀ ups and uns, gen. vern., Asia Minor, Türkiye, NW-Anatolien, Prov. Bolu, Abant Gölü, 1000 m. EMEM.
 Fig. 13, 14: ♂ ups and uns, gen. vern., Uludag, Tarihiçinar, 600 m, TR. EMEM.
 Fig. 15, 16: ♀ ups and uns, gen. vern., Uludag, 600 m, Tarihiçinar, NW-Anat. Bursa. EMEM.
 Fig. 17, 18: ♂ ups and uns, gen. vern., UdSSR, Westkaukasus, Abchasien, 25.V.1958, 1900 m. EMEM.

Colour plate 4

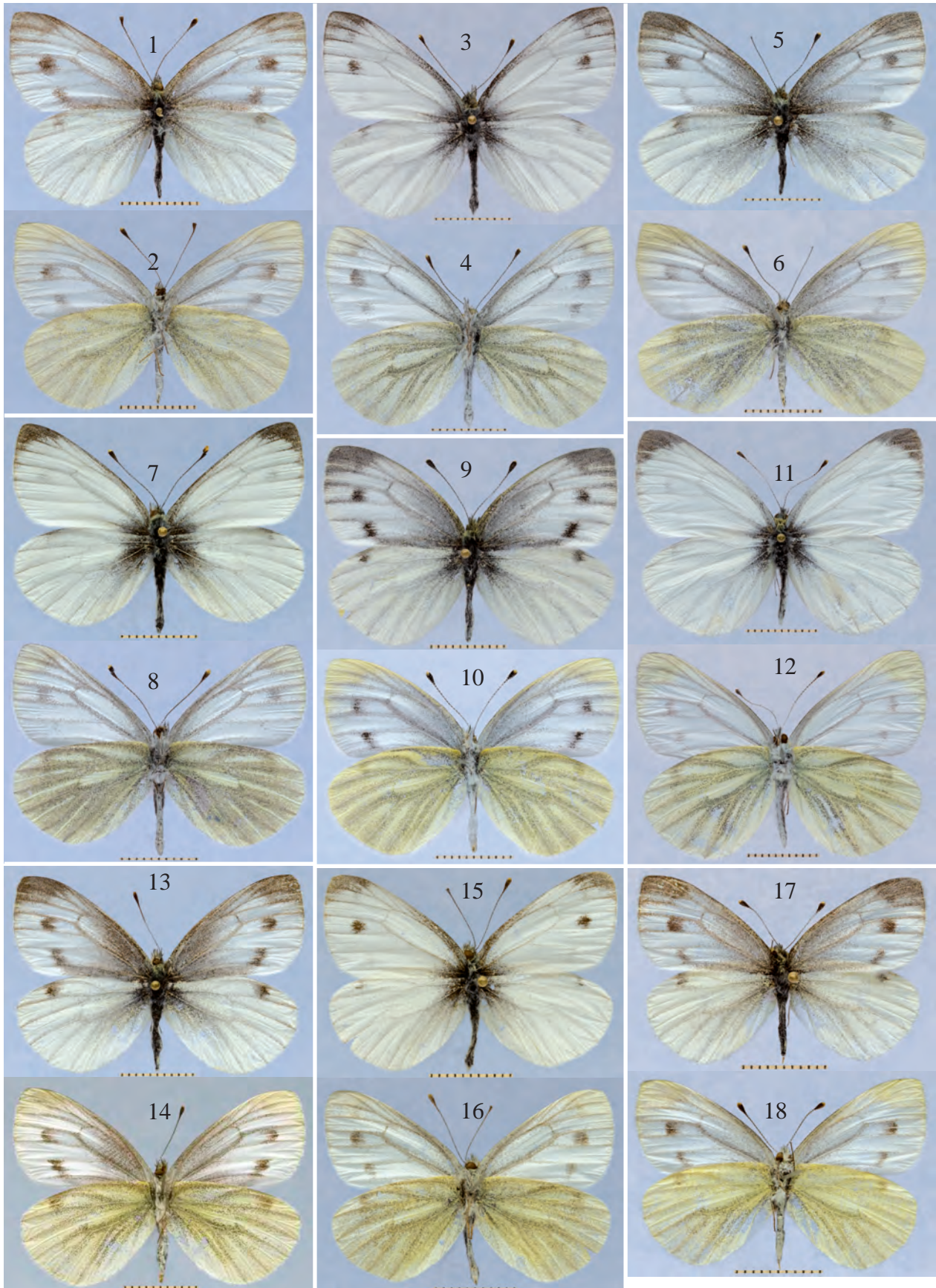


Fig. 1-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 (Complete data see legend p. ??)

Fig. 1, 2: ♀ ups and uns, gen. vern., Caucasus, Suchumi, 1000 m. EMEM.

Fig. 3-10: ♀ ups and uns, gen. vern., Nord Kaukasus, Kislovodsk vic., Podkumok. EMEM.

Fig. 11-14: ♂, ♀ ups and uns, gen. vern., Aserbajdjan [Aserbeidschan], Lenkoran, vic. Alexeevka. EMEM.

Fig. 15-18: ♂, ♀ ups and uns, gen. vern., Armenia, 1800 m, Dilizhan. EMEM.

Colour plate 5



Fig. 1, 2: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ ups and uns, gen. vern., U.S.S.R., Armenia, Chosrov pres., 1500 m, 16.VI.1986, O. GORBUNOV. leg. EMEM.

Fig. 3, 4: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♀ ups and uns, gen. vern., Armenia, Khosrov State Reserve, 2000 m, 20.VI.-10.VII.1996, A. DANTCHENKO leg. EMEM Sept. 1996. EMEM.

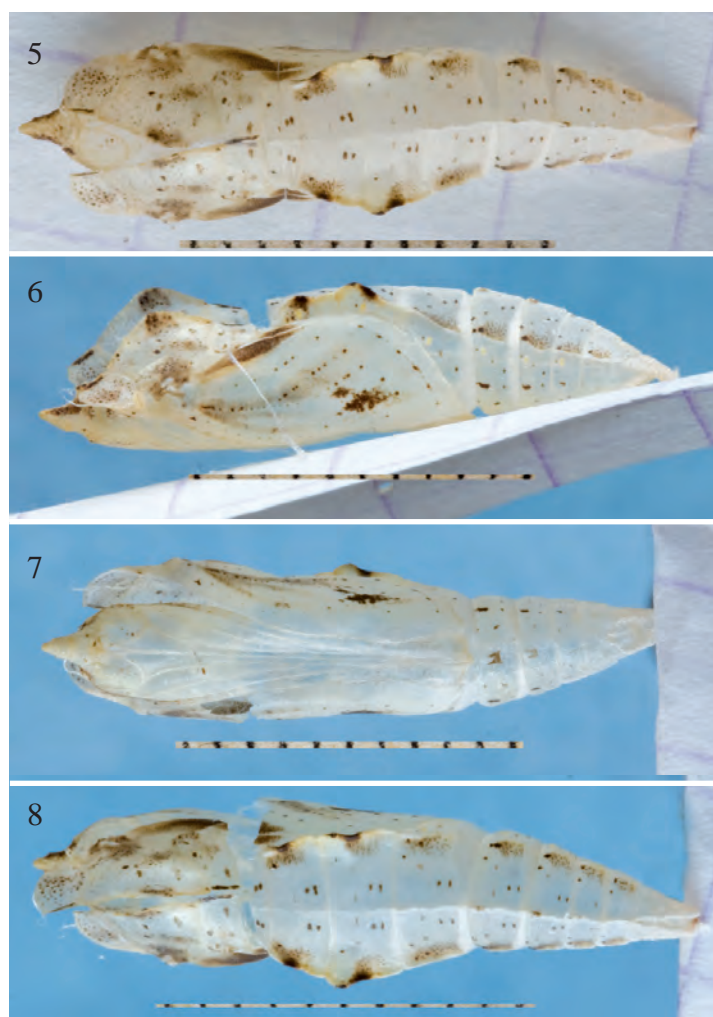


Fig. 5-8: *Pieris belovi* spec. nov., pupae, Armenia, Aragaz, Amberd Valley left side, 3400 m [correct is 3120 m], female coll. 15.VIII.1998, ex ovo 20.23.1998, A. DANTCHENKO leg., EMEM, 10.VI.2010. EMEM.

Colour plate 6



Fig. 1-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 (Complete data see legend p. ??)

Fig. 1-4: ♂, ♀ ups and uns, gen. vern., U.S.S.R., Nachitchevan, Zangezur Range, Bitchemek settl., 1600 m. EMEM.

Fig. 5-16: ♂♂, ♀♀ ups and uns, gen. vern., Armenia, Aragaz, Amberd Valley left side, 2800 m [correct is 2220 m]. EMEM.

Fig. 17, 18: ♂ ups and uns, gen. aest., Asia Minor, Türkei, Östl. Schwarzes Meer, Prov. Trabon, Trabzon Sumela-

Colour plate 7

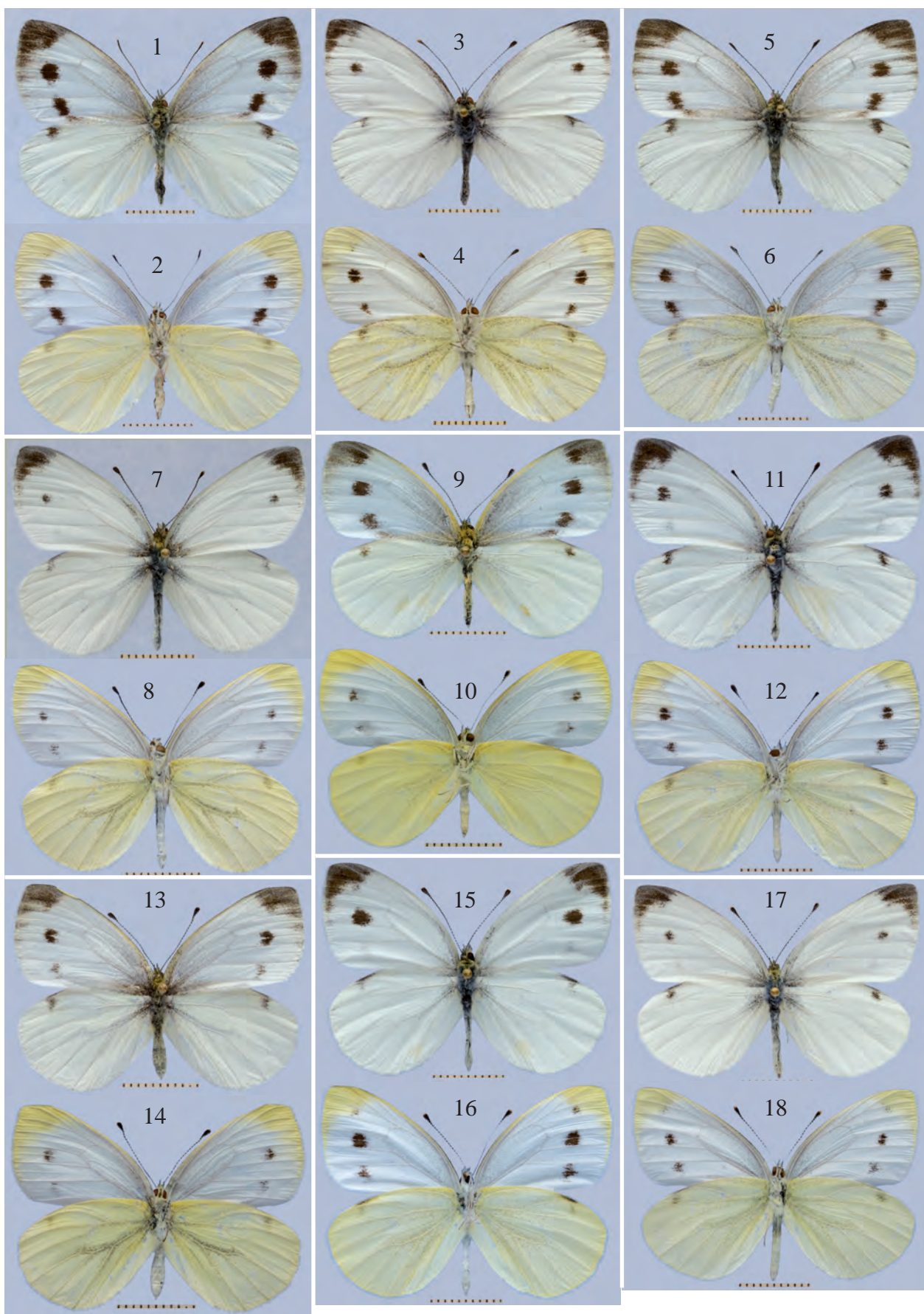


Fig. 1-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 {Complete data see legend p. ??}
 Fig. 1-2: ♀ ups and uns, gen. aest., Asia Minor, Türkei, Östl. Schwarzes Meer, Prov. Trabon, Trabzon Sumela-Kloster. EMEM.
 Fig. 3-6: ♂, ♀ ups and uns, gen. aest., SO-Europa, europ. Türkei, Marmerameer, Bosporus, Istanbul, Yesilköy. EMEM.
 Fig. 7-14: ♂♂ ups and uns, gen. aest., Nord Kaukasus, Kislovodsk vic., Podkumok. EMEM.
 Fig. 15-18: ♂♂ ups and uns, gen. aest., Dagestan, Gunib, 1800 m. EMEM.

Colour plate 8

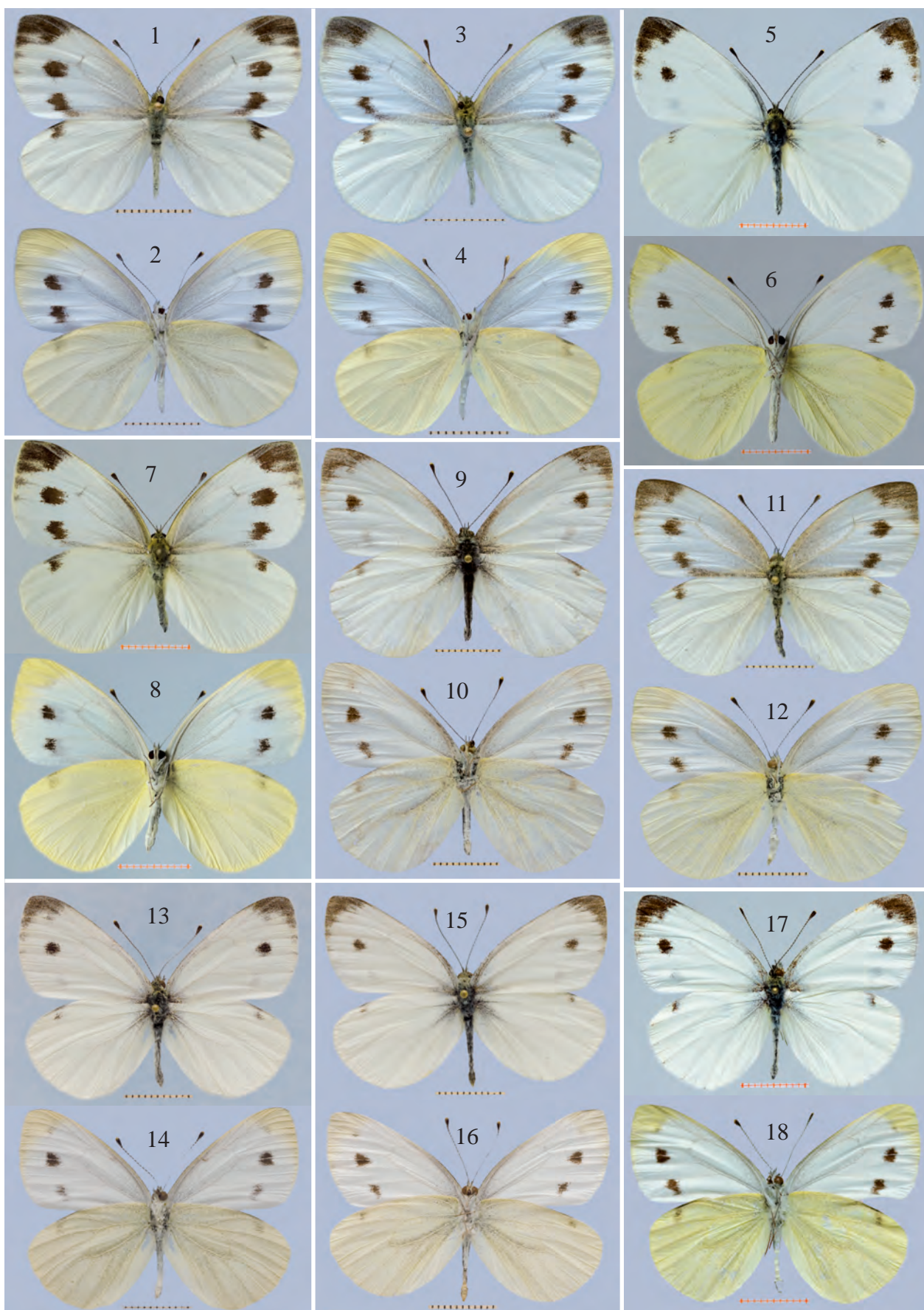


Fig. 1-18: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 (Complete data see legend p. ??)
 Fig. 1-4: ♀ ups and uns, gen. aest., Dagestan, Gunib, 1800 m, e.o. 15.IX.1997. EMEM.
 Fig. 5-8: ♂, ♀ ups and uns, gen. aest., Transcaucasia, Azerbaijan, Lerik vic., 1100 m. EMEM.
 Fig. 9-12: ♀ ups and uns, gen. aest., U.S.S.R. Georgia, Trialetsky mont. [range], Tzratzkharo Pass, 2350 m. EMEM.
 Fig. 13, 14: ♂ ups and uns, gen. aest., Georgia, Meshetsky Mt., Atzcuri, 7-9.VII.1987, BASIL TUZOV. EMEM.
 Fig. 15, 16: ♂ ups and uns, gen. aest., U.S.S.R., Nachitchevan, Zangezur Range, Bitchemek settl., 1600 m. EMEM.
 Fig. 17, 18: ♂ ups and uns, gen. aest., Armenia, Aiodzorsky range, Gnyschik vill., H. 1900-2200 m. EMEM.

Colour plate 9



Fig. 1-12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931 (Complete data see legend p. ??)
 Fig. 1-4: ♂, ♀ ups and uns, gen. aest., UdSSR, Armenia, Cachkadzor. EMEM.
 Fig. 5-8: ♂, ♀ ups and uns, gen. aest., Armenia, Khosrov Res., 2000 m. EMEM.
 Fig. 9-12: ♂, ♀ ups and uns, gen. aest., Armenia, Aragatz mts., 2800 m. EMEM.
 Fig. 13-16: *Pieris pseudorapae mazandarana* EITSCHBERGER, 1986, ♂, ♀ ups and uns, gen. aest., N-Iran, Pr. Mazandaran. EMEM.
 Fig. 17, 18: Hybrid ♂, *P. napi* ♂ from Moscow City, 16.V.1997 x *P. pseudorapae suffusa* ♀, Nord Kaukasus. EMEM.

Colour plate 10

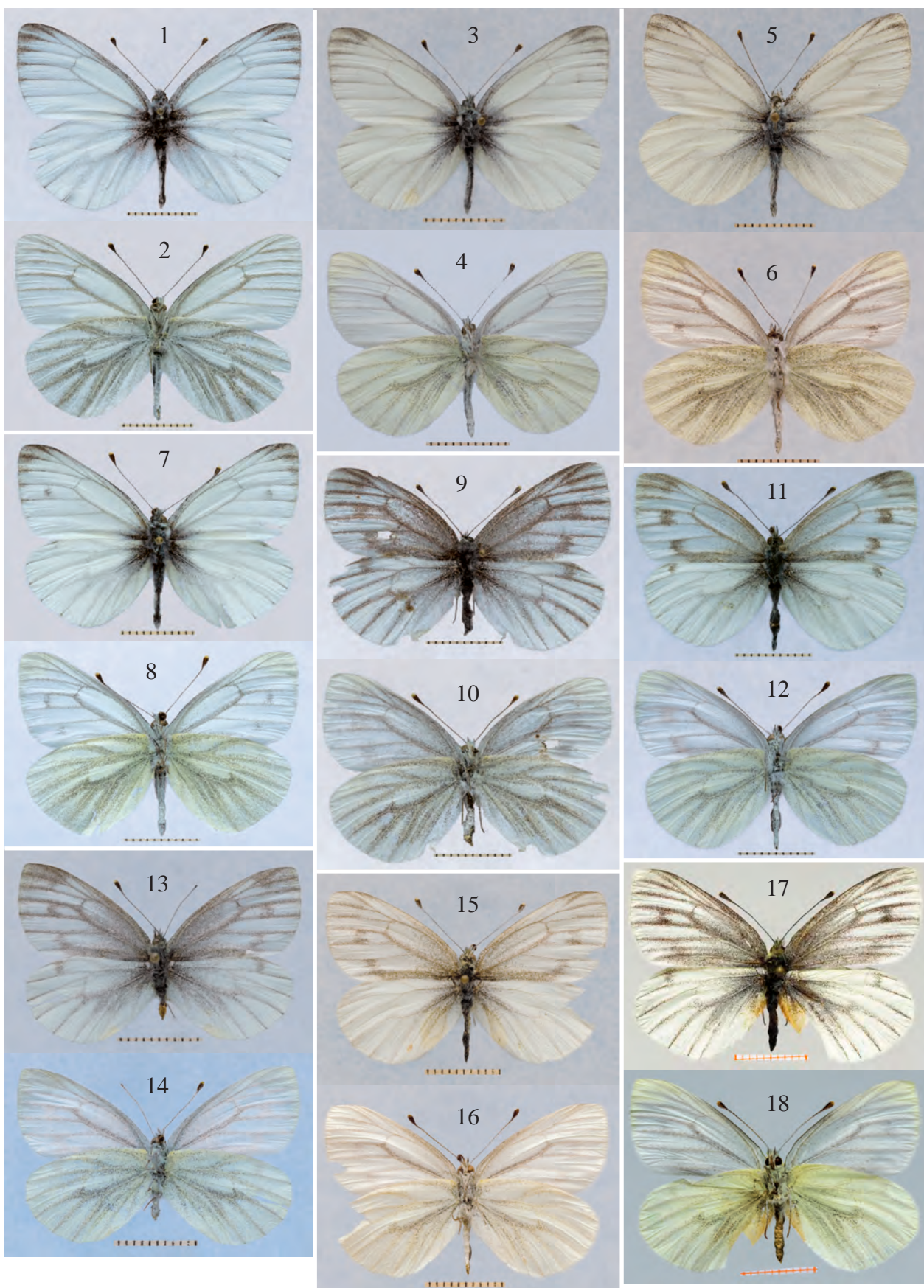


Fig. 1-14: *Pieris bowdeni* EITSCHBERGER, 1983 (Complete data see legend [p. ??](#))
 Fig. 1, 2: HT ♂ ups and uns, gen. vern., Türkei, Agri, Asagi Kent, 2200-2400 m. EMEM. Fig. 3, 4, 7, 8: PTs ♂♂, ups and uns, gen. vern., Türkei, Agri, Asagi Kent, 2200-2400 m. EMEM. Fig. 5, 6: PT ♂, ups and uns, gen. vern., Türkei, Erzurum, Palandöken Dag, 2800-3000 m. EMEM. Fig. 9-12, 15, 16: PTs ♀♀, ups and uns, gen. vern., Türkei, Agri, Asagi Kent, 2200-2400 m. EMEM.
 FIG. 13, 14: *Pieris bowdeni* EITSCHBERGER, 1983, Paratypus ♀, ups and uns, gen. vern., /Türkei, Erzurum, Palandöken Dag, 2800-3000 m, 25.VII.[19]78, leg. ECKWEILER//Paratypus ♂, *Pieris bowdeni* EITSCHBERGER, 1982//GP 1624/. EMEM.
 Fig. 17, 18: *Pieris belovi* spec. nov., PT ♀, ups and uns, gen. vern., Transcaucasus, Armenia, Aragatz mts., 3200 m. EMEM.

Colour plate 11

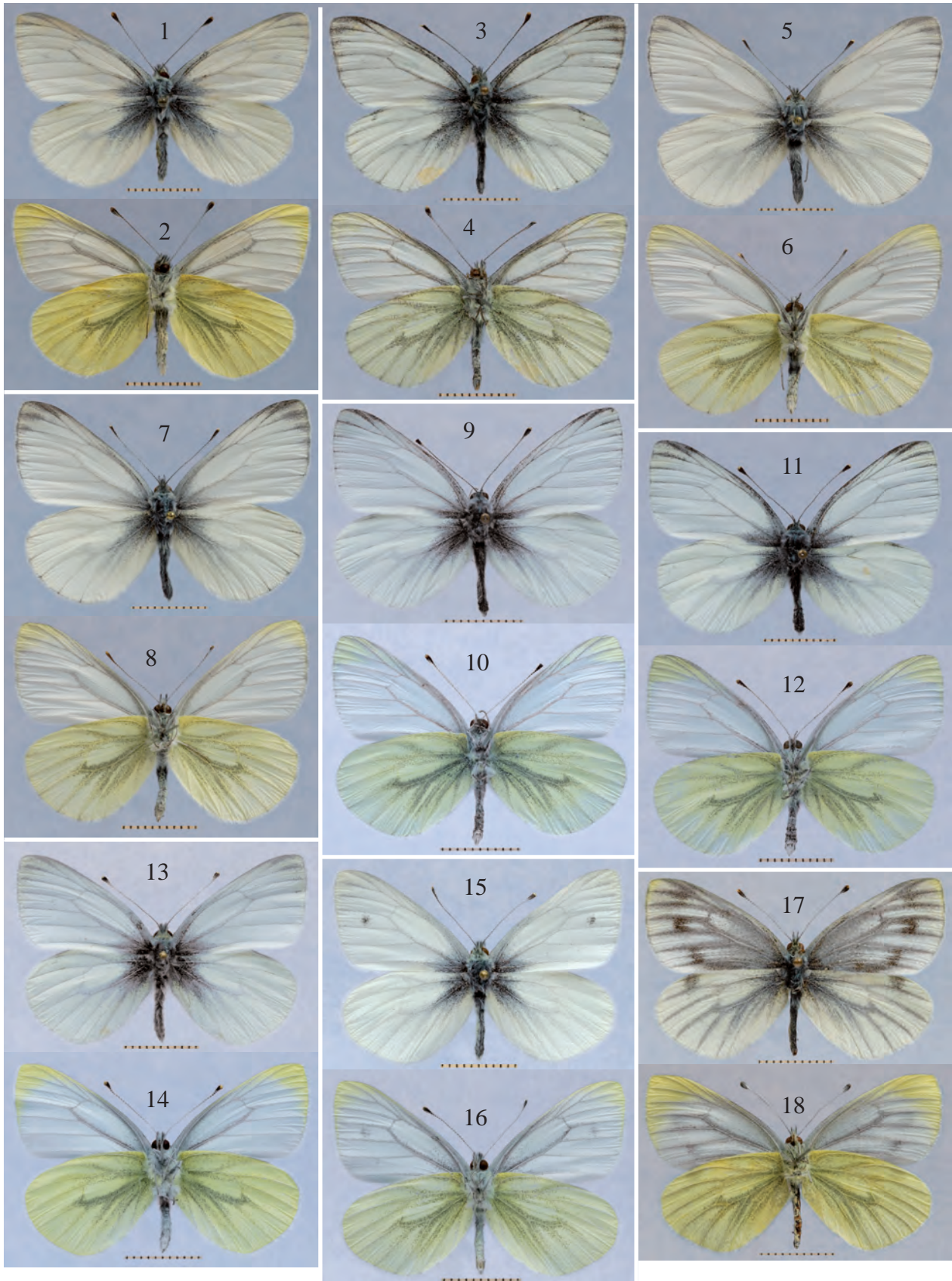


Fig. 1-18: *Pieris belovi* spec. nov. (Complete data see legend p. ??)
 Fig. 1-4, 17, 18: (1, 2) HT ♂, (3, 4) PT ♂, (17, 18) AT ♀, ups and uns, gen. vern., Transcaucasus, Armenia, Aragatz mts.. EMEM.
 Fig. 5-8: PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz mts., 3200 m, Alagez lake. EMEM.
 Fig. 9-12: , PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz, 3000-3200 m. EMEM.
 Fig. 13-16: PTs ♂♂, ups and uns, gen. vern., Armenia, Aragatz, Amberd valley 3400 m. EMEM.

Colour plate 12



Fig. 1-18: *Pieris belovi* spec. nov. (Complete data see legend p. ??)
 Fig. 1-6: PT ♀, ups and uns, gen. vern., Armenia, Aragatz mts., 3200 [3100] m, Alagez lake, 24.07.[19]96, DANTCHENKO leg. EMEM.
 Fig. 7-10: *Pieris belovi* spec. nov., PTs ♀♀, ups and uns, gen. vern., Armenia, Aragatz, 3000-3200 m. EMEM.
 Fig. 11-14: PTs ♀♀, ups and uns, gen. vern., Armenia, Aragatz, Amberd valley 3400 m. EMEM.
 Fig. 15-18: PTs ♂♂, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m. EMEM.

Colour plate 13



Fig. 1-18: *Pieris belovi* spec. nov. (Complete data see legend p. ??)
 Fig. 1-4: PTs ♀♀, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m. EMEM.
 Fig. 5, 6: PT ♂, ups and uns, gen. aest., Armenia, Aragatz, 3200 m, Alagez lake. EMEM.
 Fig. 7-18: PT ♀♀, ♂♂, ups and uns, gen. aest., Armenia, Aragatz, Amberd valley 3400 m. EMEM.

Colour plate 14

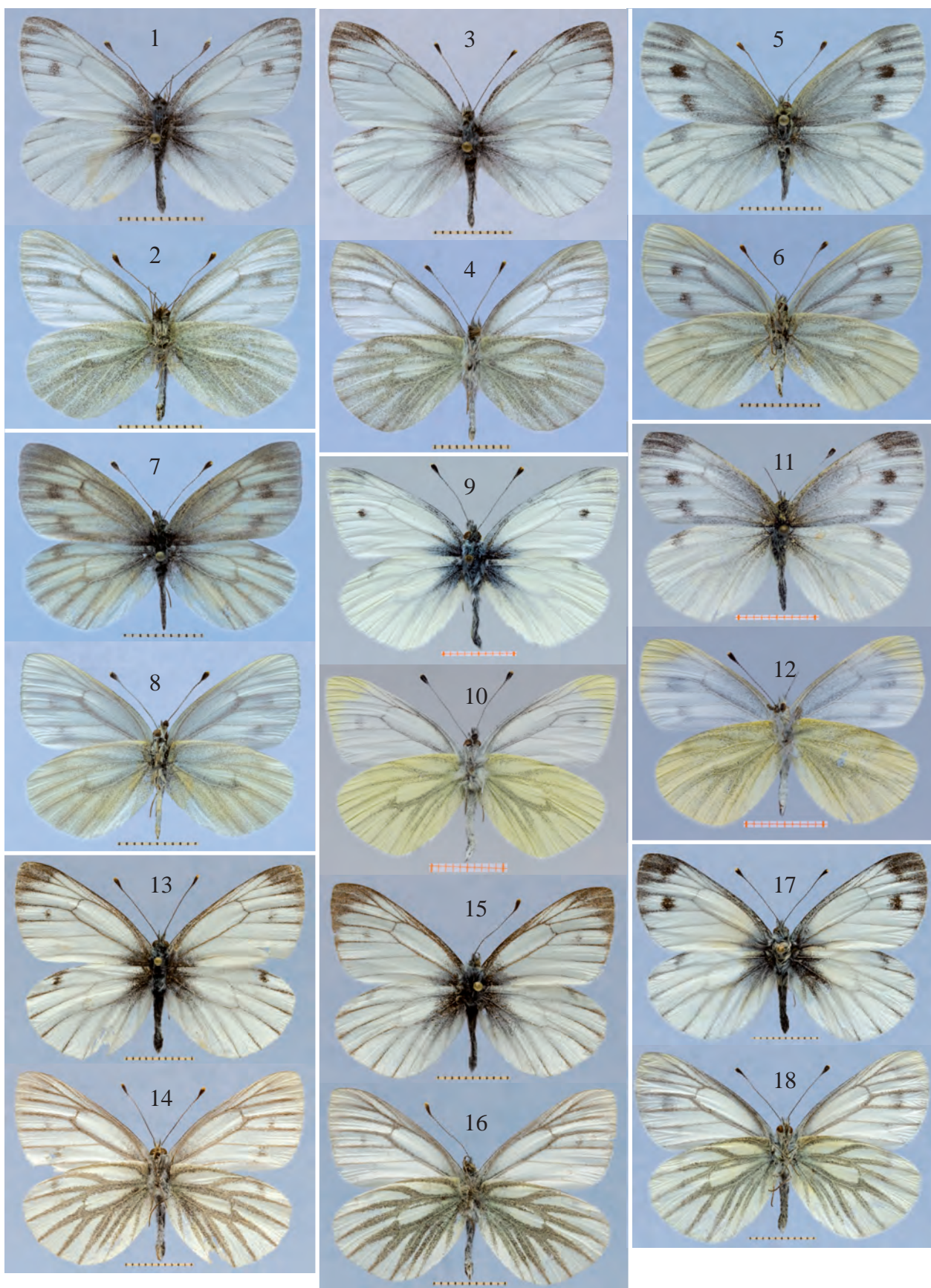


Fig. 1-8: *Pieris bryoniae goergneri* EITSCHBERGER, 1985

Fig. 1, 2: , HT ♂, ups and uns, gen. vern., Türkei, Hakkari, Karandag-Osthang. EMEM.

Fig. 3, 4: PPT ♂, ups and uns, gen. vern., Türkei, Hakkari, Bercelem yaylasi. EMEM.

Fig. 5, 6: AT ♀, ups and uns, gen. vern., Türkei, Hakkari, Karandag-Osthang. EMEM.

Fig. 7, 8: PT ♀, ups and uns, gen. vern., Türkei, Hakkari, Karandag-Osthang. EMEM.

Fig. 9-12: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, ♀ ups and uns, gen. vern., Armenia, Sevan lake. EMEM

Fig. 13-18: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂♂, ups and uns, gen. vern., (13, 14) Nord-Kaukasus, Uzunkol, (15, 16) USSR-Caucasus, Elbrus, (17, 18) Kaukasus, Dombai, Ulgen-Tal. EMEM. (Complete data see legend p. ??)

Colour plate 15



Fig. 1-18: *Pieris bryoniae caucasica* LORKOVIC, 1968 (Complete data see legend p. ??)
 Fig. 1, 2: ♀, ups and uns, gen. vern., U.S.S.R., W-Kaukasus, Momzyshka, (1700 m). EMEM.
 Fig. 3, 4: ♀, ups and uns, gen. vern., Nordwestkaukasus, Teberda, 2000-2400 m. EMEM.
 Fig. 5, 6: ♀, ups and uns, gen. vern., Kaukasus/SU, Mussa Atschitara See, 2800 m. EMEM.
 Fig. 7-14: ♂♂, ♀♀, ups and uns, gen. vern., Georgia, 2500 m, Borzhomi region, Trialetzky range. EMEM.
 Fig. 15-18: ♀, ♂, ups and uns, gen. vern., Transcaucasia, Georgia, 2100-2300 m, Bakurina env. EMEM.

Colour plate 16



Fig. 1, 2: *Pieris bryoniae turcica* EITSCHBERGER & HESSELBARTH, 1977, ♂, ups and uns, gen. vern., Asia Minor, Türkei, NW-Anatolien, Prov. Bolu, Abant Gölü. EMEM.

Fig. 3-12: *Pieris bryoniae turcica* EITSCHBERGER & HESSELBARTH, 1977, 2 ♂♂, 3 ♀♀, ups and uns, gen. vern., TR-Bolu, 12 km n Bolu, 1800 m NN, 11.6.[19]92, Hensle leg. EMEM.

Fig. 13, 14: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂, ups and uns, gen. aest., Georgia, Borzhoni vall., Tsra-Tskhara pass. EMEM.

Fig. 15-18: *Pieris bryoniae caucasica* LORKOVIC, 1968, ♂♂, ♀, ups and uns, gen. vern., Transcaucasia, Georgia, 2100-2300 m, Bakurinaï env., Tsra-Tskhara pass. EMEM. (Complete data see legend p. ??)

Colour plate 17



Fig. 1-18: *Pieris bryoniae henslei* subspec. nov. (Complete data see legend [p. ??](#))

Fig. 1, 2, 15, 16: , (1, 2) HT ♂, (15, 16) PT ♀, U.S.S.R., Armenia m., Zangezur Mt. distr., Megri-pass (2800 m). EMEM.

Fig. 3-12: PTs 2 ♂♂, 2 ♀♀, (7, 8) AT ♀, Armenia m., Zangezur Mt. distr., Megri-pass (2800 m). EMEM.

Fig. 13, 14: PT ♂, U.S.S.R., Armenia, Kafan distr., Chuztup mont., 2200 m, 26.VI.1982, GORBUNOV leg. EMEM.

Fig. 17, 18: PT ♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv., 18.-25.VII.1999, A. DANTCHENKO leg., EMEM, 24.XI.2012. EMEM.

Colour plate 18



Fig. 1-18: *Pieris bryoniae henslei* subsp. nov. (Complete data see legend p. ??)

Fig. 1, 2: PT ♂, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi riv. EMEM.

Fig. 3-14: PTs 3 ♂♂, 3 ♀♀, Armenia, South Zangezur, Kapan District, 3000 m, Kadzharan Akhtchi river. EMEM.

Fig. 15-18: *Pieris bryoniae henslei* subsp. nov., PTs ♂, ♀, Armenia, Zangezur range, Kadzharan vic., 2700 [2450] m. EMEM.

Colour plate 19

1 2 3 4



Fig. 1: View on the Rhododendron belt near the biotope of *Pieris bryoniae caucasica* LORKOVIC, 1968, Georgia, Tskhratskaro Pass, 2400 m, 5.07.1999. Photo DANCHENKO.

Fig. 2, 3: *Pieris bryoniae caucasica* LORKOVIC, 1968, (3) ♀, (4) ♂ nectaring on local *HESPERIS* spec., near Georgia, Tskhratskaro Pass, 2200 m, 5.07.1999. Photo DANCHENKO.

Fig. 4: Copula of *Pieris bryoniae caucasica* LORKOVIC, 1968, in the biotope, Georgia, Tskhratskaro Pass, 2440 m, 5.07.1999. Photo DANCHENKO.

Fig. 5: Foodplant of *Pieris belovi* spec. nov., Armenia, Aragatz, Amberd valley 3150 m.

Fig. 6, 8: Edge of the biotope of *Pieris belovi* spec. nov., Armenia, Aragatz, Amberd valley 3150 m.

Fig. 7: Biotope of *Pieris belovi* spec. nov., autumn aspect Armenia, Aragatz, Amberd valley 3150 m. All photos Danchenko.

Colour plate 20



Fig. 1: Biotope of *Pieris belovi* spec. nov., summer aspect Armenia, Aragatz, Amberd valley 3150 m.

Fig. 2: General view on the biotope of *Pieris belovi* spec. nov., autumn aspect Armenia, Aragatz, Amberd valley 3150 m.

Fig. 3: Foodplant of *Pieris belovi* spec. nov. with three adult larvae, Armenia, Aragatz, Amberd valley 3150 m.

Fig. 4: Preferred place of *Pieris belovi* spec. nov. in the biotope.

Fig. 5: Nectaring ♂ of *Pieris belovi* spec. nov. on *Arabis caucasica*.

Fig. 6: Resting ♀, bred in Moscow. All photos Danchenko.

Colour plate 21



Fig. 1-5: Foodplant of *Pieris belovi* spec. nov. with larvae, Armenia, Aragatz, Amberd valley 3150 m.

Fig. 6: Biotope of *Pieris bryonia* (?) caucasica LORKOVIC, 1968, Armenia, Amasia region.

Fig. 7: Foodplant (*Cardamines* spec.) of *Pieris bryonia* (?) caucasica LORKOVIC, 1968, Armenia, Amasia region.

Fig. 8: Biotope of *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, Armenia, Sevan lake.

Fig. 9: General view on the biotope of *Pieris bryonia henslei* subspec. nov., Armenia, Khustup Mtn. All photos DANCHENKO.

Colour plate 22

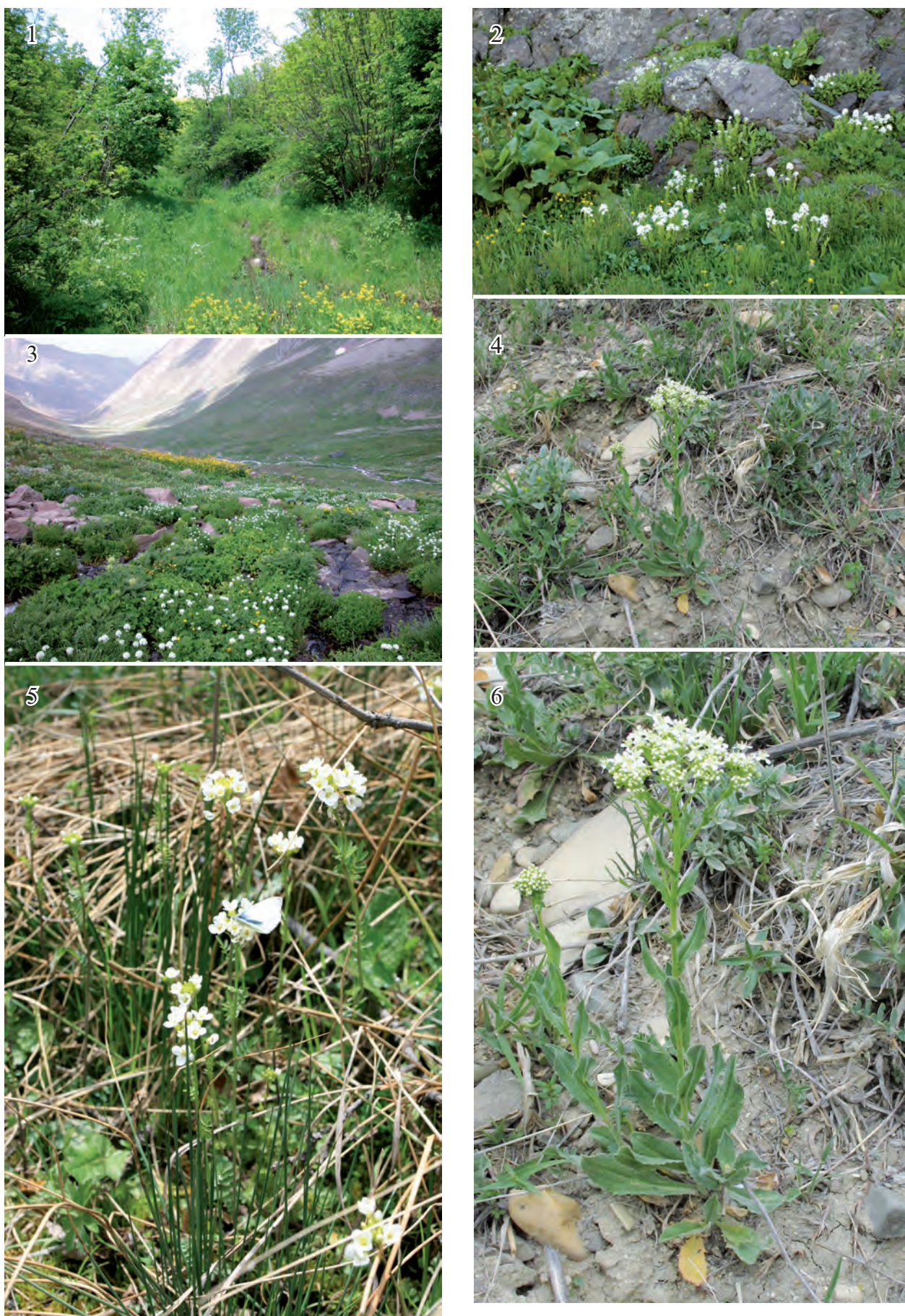


Fig. 1: Biotope of *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, Armenia, Aghavnadzor vic.
 Fig. 2, 3: Biotope of *Pieris bryonia henslei* subsp. nov., (2) Armenia, Khustup Mtn. (see also col. pl. 21: 9), (3) Armenia, Kazharan region.
 Fig. 4, 6: Foodplant of *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, Armenia, Dilizhan vic.
 Fig. 5: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ nectaring on *Cardamine* spec., Armenia, Aghavnadzor vic.

Colour plate 23

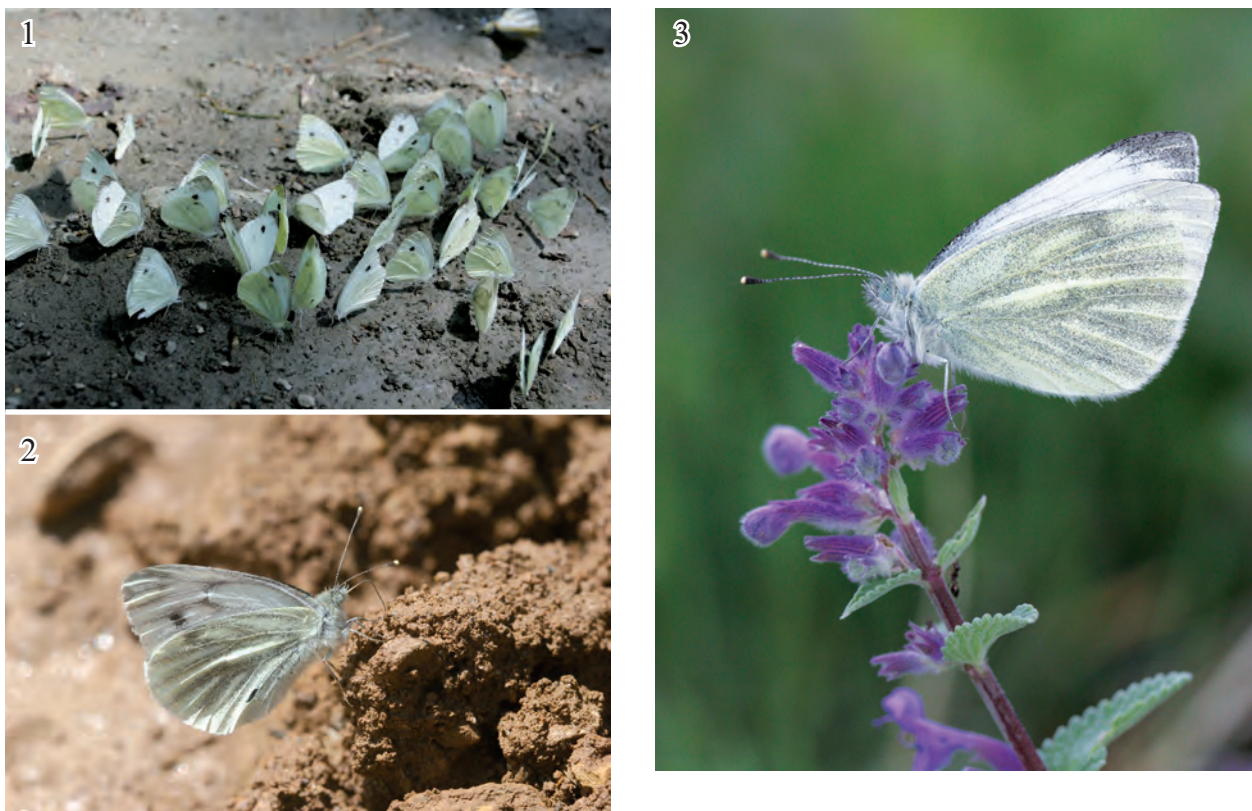


Fig. 1: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, gen. aest., mud puddling, Armenia Acharkhut vic. Fig. 1-6: Photos DANCHENKO.

Fig. 2: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂, Armenia, Kotayk, ca. 37 km N Yerevan, Aghveran, 40°31'09"N 44°33'47"E, 1800-2200 m, 16.06.2011. Photo GRIESHUBER.

Fig. 3: *Pieris pseudorapae suffusa* SHELJUZHKO, 1931, ♂ gen. vern., Armenia, Tavush vic., May 2012.